WHAT IS CLAIMED IS:

1. A method of enhancing the recovery of useful coal from screenbowl centrifuge separation operations comprising adding to the screenbowl centrifuge, from about 0.03 lbs active polymer/ton dry solids in centrifuge to about 0.70 lbs active polymer/ton dry solids in centrifuge, of a cationic terpolymer, wherein said cationic terpolymer is prepared by polymerizing from about 1 to about 99.1 mole percent of one or more cationic monomers, from about 0.1 to about 10 mole percent of one or more hydroxyalkyl (meth)acrylates and from one to about 98.1 mole percent of one or more nonionic monomers.

2. The method of claim 1 wherein the nonionic monomers present in the cationic terpolymer are selected from acrylamide and methacrylamide and the cationic monomers are selected from dimethylaminoethyl acrylate methyl chloride quaternary salt, dimethylaminoethyl methacrylate methyl chloride quaternary salt, acrylamidopropyltrimethylammonium chloride and methacrylamidopropyltrimethylammonium chloride.

3. The method of Claim 2 wherein the hydroxyalkyl (meth)acrylate present in the cationic terpolymer is selected from hydroxyethyl acrylate, hydroxypropyl acrylate, hydroxybutyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate and 6-hydroxyhexyl methacrylate.

4. The method of Claim 1 wherein the cationic terpolymer is prepared by polymerizing from about 20 to about 80 mole percent of one or more cationic monomers, from about 1 to about 2.5 mole percent of one or more hydroxyalkyl (meth)acrylates and from 17.5 to about 79 mole percent of one or more nonionic monomers.

5. The method of Claim 4 wherein the nonionic monomer present in the cationic terpolymer is acrylamide and the cationic monomer present in the cationic terpolymer is dimethylaminoethyl acrylate methyl chloride quaternary salt.

6. The method of Claim 5 wherein the hydroxyalkyl (meth)acrylate present in the cationic terpolymer is 2-hydroxyethyl methacrylate.

7. A method of enhancing the recovery of useful potassium chloride from screenbowl centrifuge separation operations comprising adding to the screenbowl centrifuge, from about 0.03 lbs active polymer/ton dry solids in centrifuge to about 0.70 lbs active polymer/ton dry solids in centrifuge, of a cationic terpolymer, wherein said cationic terpolymer is prepared by polymerizing from about 1 to about 99.1 mole percent of one or more cationic monomers, from about 0.1 to about 10 mole percent of one or more hydroxyalkyl (meth)acrylates and from one to about 98.1 mole percent of one or more nonionic monomers.

8. The method of claim 7 wherein the nonionic monomers present in the cationic terpolymer are selected from acrylamide and methacrylamide and the cationic monomers are selected from dimethylaminoethyl acrylate methyl chloride quaternary salt, dimethylaminoethyl methacrylate methyl chloride quaternary salt, acrylamidopropyltrimethylammonium chloride and methacrylamidopropyltrimethylammonium chloride.

9. The method of Claim 7 wherein the hydroxyalkyl (meth)acrylate present in the cationic terpolymer is selected from hydroxyethyl acrylate, hydroxypropyl acrylate, hydroxybutyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate and 6-hydroxyhexyl methacrylate.

10. The method of Claim 7 wherein the cationic terpolymer is prepared by polymerizing from about 20 to about 80 mole percent of one or more cationic monomers, from about 1 to about 2.5 mole percent of one or more hydroxyalkyl (meth)acrylates and from 17.5 to about 79 mole percent of one or more nonionic monomers.

11. The method of Claim 7 wherein the nonionic monomer present in the cationic terpolymer is acrylamide and the cationic monomer present in the cationic terpolymer is dimethylaminoethyl acrylate methyl chloride quaternary salt and the hydroxyalkyl (meth)acrylate present in the cationic terpolymer is 2-hydroxyethyl methacrylate.

12. A method of enhancing the recovery of useful borax from screenbowl centrifuge separation operations comprising adding to the screenbowl centrifuge, from about 0.03 lbs active polymer/ton dry solids in centrifuge to about 0.70 lbs active polymer/ton dry solids in centrifuge, of a cationic terpolymer, wherein said cationic terpolymer is prepared by polymerizing from about 1 to about 99.1 mole percent of one or more cationic monomers, from about 0.1 to about 10 mole percent of one or more hydroxyalkyl (meth)acrylates and from one to about 98.1 mole percent of one or more nonionic monomers.

13. The method of claim 12 wherein the nonionic monomers present in the cationic terpolymer are selected from acrylamide and methacrylamide and the cationic monomers are selected from dimethylaminoethyl acrylate methyl chloride quaternary salt, dimethylaminoethyl methacrylate methyl chloride quaternary salt, acrylamidopropyltrimethylammonium chloride and methacrylamidopropyltrimethylammonium chloride.

14. The method of Claim 12 wherein the hydroxyalkyl (meth)acrylate present in the cationic terpolymer is selected from hydroxyethyl acrylate, hydroxypropyl acrylate, hydroxybutyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate and 6-hydroxyhexyl methacrylate.

15. The method of Claim 12 wherein the cationic terpolymer is prepared by polymerizing from about 20 to about 80 mole percent of one or more cationic monomers, from about 1 to about 2.5 mole percent of one or more hydroxyalkyl (meth)acrylates and from 17.5 to about 79 mole percent of one or more nonionic monomers.

16. The method of Claim 12 wherein the nonionic monomer present in the cationic terpolymer is acrylamide and the cationic monomer present in the cationic terpolymer is dimethylaminoethyl acrylate methyl chloride quaternary salt and the hydroxyalkyl (meth)acrylate present in the cationic terpolymer is 2-hydroxyethyl methacrylate..

17. The method of Claim 1 wherein an inert fluorescent tracer is added to the cationic terpolymer and one or more fluorometers are used to detect the fluorescent signal of the inert fluorescent tracer, which fluorescent signal is used to determine how much inert fluorescent tracer is present and that information is used to determine how much cationic terpolymer is present and by knowing how much cationic terpolymer is present then if desired, adjustments to the operating conditions of the screenbowl centrifuge can be made to ensure the desired amount of cationic terpolymer is present.

18. The method of Claim 7 wherein an inert fluorescent tracer is added to the cationic terpolymer and one or more fluorometers are used to detect the fluorescent signal of the inert fluorescent tracer, which fluorescent signal is used to determine how much inert fluorescent tracer is present and that information is used to determine how much cationic

terpolymer is present and by knowing how much cationic terpolymer is present, then if desired, adjustments to the operating conditions of the screenbowl centrifuge can be made to ensure the desired amount of cationic terpolymer is present.

19. The method of Claim 12 wherein an inert fluorescent tracer is added to the cationic terpolymer and one or more fluorometers are used to detect the fluorescent signal of the inert fluorescent tracer, which fluorescent signal is used to determine how much inert fluorescent tracer is present and that information is used to determine how much cationic terpolymer is present and by knowing how much cationic terpolymer is present, then if desired, adjustments to the operating conditions of the screenbowl centrifuge can be made to ensure the desired amount of cationic terpolymer is present.